

## **Annual Drinking Water Quality Report**

2008

We're pleased to present to you this annual quality report. This report is designed to inform you about the quality of water we deliver to you everyday. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

The City of Long Beach routinely monitors for contaminants in your drinking water according to federal and state laws. The table shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup> 2008. All drinking water, including bottled water, may be reasonably expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily pose a health risk.

MCL's are set at very stringent levels. To understand the possible health effects described, a person would have to drink 2 liters of water everyday at the MCL level for a lifetime to have a one in a million chance of having the described health effects.

You'll notice that our Disinfection By-Products (DBP's) did not pass. In the future we'll be using chlorine dioxide as an oxidizer of our raw water instead of chlorine gas. Chlorine dioxide does not produce trihalomethanes (THM) or haloacetic acids (Haa5) when it reacts with organic material in water, whereas chlorine gas does. We sample monthly to check the levels of these constituents and report the results quarterly to Dept of Health. We started the chlorine dioxide up in September 2008 and our results in the distribution system have lowered to 34ug/L THM and 17.6 ug/L Haa5. Prior to start up, Quarters 1, 2, & 3 saw highs of 111 ug/L THM and 55.6 ug/L Haa5. New raw water treatment techniques have shown to improve our water quality and keep our Disinfection By-Products down well below DOH's standards. However, DBP's are monitored as an average of the four quarterly results, and our average was over the limit. Although we did not meet our goals in 2008, we anticipate they will be met in 2009.

Our water sources are spring & run-off fed ( Dohman & Main Impoundment ) and the other source (Mattix Creek) pumps into the Main Impoundment as a back up when it gets low. This water is pumped to the treatment facility, chemically treated, allowed to settle, filtered to a clearwell, and then pumped to storage, injected with chlorine and fed to town.

Total Coliform—Are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful bacteria may be present.

Fecal Coliforms & E.Coli—Are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these waters can cause short term effects, such as diarrhea, cramps, nausea, and headaches. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.

Turbidity— Has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms.

THMs & HAA5 (Trihalomethanes & Haloacetic Acids) Byproducts of chlorination. Some people who drink water containing these in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

All sources of drinking water are subject to potential contaminants that are naturally occurring or man made. Those contaminants can be microbes, organic or inorganic chemicals or radioactive materials. More information about contaminants and potential health effects can be obtained by calling EPA'S HOTLINE AT (800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-compromised persons such as people with cancer undergoing chemotherapy, people who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk of infection. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

The City of Long Beach is committed to providing top quality water to every tap. We ask our customers to help us protect our water sources, which are the heart of our community, our way of life and our children's future. Please call the water plant if you have any questions at 360-642-8078, 642-2203, or email us at lbwtph2o@yahoo.com

Ask for either Rick Gray or Jake Binion

Contaminant	Violation Y/N	Level Detected	MCLG	MCL	Likely Source
Total Coliform Bacteria.	N	0	0	0	Naturally present in the environment
Fecal Coliform & E.Coli.	N	0	0	0	Animal & Human fecal waste
Turbidity	N	.30 ntu March 29 <sup>th</sup> 2008	N/A	1.0 ntu	Soil Runoff
THM Trihalomethanes	Y	111 ug/l	0	80 ug/l	Byproduct of drinking water chorination
HAA5 Haloacetic Acids	Y	55.6 ug/l	0	60 ug/l	Byproduct of drinking water chorination
IOC	Metals, salts, & other chemical compounds that don't contain carbon. Such as aluminum, molybdenum, nitrite, & cyanide to name a few. Tests done yearly ( Nitrite & Nitrate ) No violations				
SOC	Man made compounds which are used throughout the world in pesticides, paints, dyes, solvents, plastics, & food additives.No violations.				
VOC	Are a subcategory of organic chemicals these are termed volatile because they evaporate easily. Most commonly found in drinking water as a by products of chlorination.  Test done quarterly  No Violation in 2008				
Radionuclides	Gross Alpha & Radium 228. No testing required in 2008 No Violation				